

WHAT IS CLAIMED IS:

1. For use with an integrated circuit package having first and second signal transmission zones, a characteristic impedance equalizer, comprising:

a first conductor having a first width and providing a characteristic impedance within said first signal transmission zone; and

a second conductor, coupled to said first conductor, having a second width and providing substantially said characteristic impedance within said second signal transmission zone.

2. The characteristic impedance equalizer as recited in Claim 1 further comprising a plurality of said first and second conductors coupled to a substrate.

3. The characteristic impedance equalizer as recited in Claim 1 wherein said first signal transmission zone is provided between a portion of said substrate containing said first conductor and a metallic heatspreader.

4. The characteristic impedance equalizer as recited in
2 Claim 1 wherein said second signal transmission zone is provided
3 between a portion of said substrate containing said second
4 conductor and a metallic stiffener.

5. The characteristic impedance equalizer as recited in
2 Claim 1 wherein said first width is greater than said second width.

6. The characteristic impedance equalizer as recited in
2 Claim 1 wherein a junction between said first conductor and said
3 second conductor has a semi-circular cross-sectional area.

7. The characteristic impedance equalizer as recited in
2 Claim 1 wherein said first and second conductors provide a
3 transmission path for a signal transmission.

8. A method of manufacturing an integrated circuit package,

2 comprising:

3 providing a substrate configured to be partitioned into first
4 and second signal transmission zones;

5 forming a first conductor having a first width and providing
6 a characteristic impedance within said first signal transmission
7 zone; and

8 forming a second conductor having a second width and providing
9 substantially said characteristic impedance within said second
10 signal transmission zone.

9. The method of manufacturing as recited in Claim 8 further
2 comprising forming a plurality of said first and second conductors.

10. The method of manufacturing as recited in Claim 8 further
2 comprising positioning a metallic heatspreader over a portion of
3 said substrate containing said first conductor and forming said
4 first signal transmission zone.

11. The method of manufacturing as recited in Claim 8 further
2 comprising positioning a metallic stiffener over a portion of said
3 substrate containing said second conductor and forming said second
4 signal transmission zone.

12. The method of manufacturing as recited in Claim 8 wherein
2 said first width is greater than said second width.

13. The method of manufacturing as recited in Claim 8 further
2 comprising forming a junction between said first conductor and said
3 second conductor having a semi-circular cross-sectional area.

14. The method of manufacturing as recited in Claim 8 wherein
2 said first and second conductors provide a transmission path for a
3 signal transmission.

15. An integrated circuit package, comprising:

a substrate configured to be partitioned into first and second
signal transmission zones; and

a characteristic impedance equalizer, including:

a first conductor having a first width providing a
characteristic impedance within said first signal transmission
zone, and

a second conductor having a second width providing
substantially said characteristic impedance within said second
signal transmission zone.

16. The integrated circuit package as recited in Claim 15
wherein said characteristic impedance equalizer contains a
plurality of said first and second conductors.

17. The integrated circuit package as recited in Claim 15
further comprising a metallic heatspreader and said first signal
transmission zone is provided between a portion of said substrate
containing said first conductor and said metallic heatspreader.

18. The integrated circuit package as recited in Claim 15
2 further comprising a metallic stiffener and said second signal
3 transmission zone is provided between a portion of said substrate
4 containing said second conductor and said metallic stiffener.

19. The integrated circuit package as recited in Claim 15
2 wherein said first width is greater than said second width.

20. The integrated circuit package as recited in Claim 15
2 wherein a junction between said first conductor and said second
3 conductor has a semi-circular cross-sectional area.

21. The integrated circuit package as recited in Claim 15
2 wherein said first and second conductors provide a transmission
3 path for a signal transmission.